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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------|----------------------|---------------------------------|------------------|
| 09/992,544 | 11/13/2001 | Constantinos Sioutas | 06666-095001 / 4417 USC-3102 | |
| 20985 | 7590 05/11/2004 | | EXAMINER | |
| | HARDSON, PC | NOLAND, THOMAS | | |
| 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081 | | | ART UNIT | PAPER NUMBER |
| J , | | | 2856 | |
| | | | DATE MAILED: 05/11/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | \sim | | | | |
|--|---|---|--|--|--|--|
| | Application No. | Applicant(s) | | | | |
| Office Action Summan | 09/992,544 | SIOUTAS ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Thomas P. Noland | 2856 | | | | |
| The MAILING DATE of this communication app Period for Reply | ars on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 66(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 17 Fe | ebruary 2004. | | | | | |
| 2a) This action is FINAL . 2b) ⊠ This | action is non-final. | | | | | |
| 3) Since this application is in condition for allowar | | | | | | |
| closed in accordance with the practice under E | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-22 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) 12-15 is/are withdraw | 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>1-11 and 16-22</u> is/are rejected. | | | | | | |
| • | Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or | 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| 11) Ine oath or declaration is objected to by the Ex | ammer. Note the attached Office | ACTION OF TOTAL | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document: 2. Certified copies of the priority document: 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list | s have been received. s have been received in Applicat rity documents have been receive u (PCT Rule 17.2(a)). | ion No ed in this National Stage | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) 🔲 Interview Summary Paper No(s)/Mail D | ate | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other: | | | | | | |

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Applicant's election without traverse of the invention group 1, claims 1-11 and 16 Paper No. 02172004 is acknowledged.

- 2. The restriction requirement is made final.
- 3. Claims 12-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 02172004.
- 4. Applicant is requested to cancel claims 12-15 in any response hereto.
- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 2 and 4-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Reference to "a third impactor" in lines 1-2 of claim 2 is unclear since no first or second impactor per se has been introduced. There is no proper antecedent for "the first impactor" in line 1 of claims 5 and 6 or "the second impactor" in line 4 of claims 5 and 6. Reference to "a second virtual impactor" in line 4 of claim 6 is confusing since there is no antecedent for a first virtual impactor in claims 1 or 6.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, mor than one year prior to the date of application for patent in the United States.

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8. Claims 1, 3, 5, 7-11 and 16-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Koutrakis et al US 5,932,795.

Note especially the abstract and Fig. 1 of Koutrakis et al. re claim 11 the first flow rate appears to be at least twice as fast as the second flow rate.

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koutrakis et al in view of Marple et al EP 352126.

Koutrakis et al does not disclose flow rates in the range claimed but columns 1 and 2 of Marple et al disclose that it is known to monitor flows in such ranges by including an initial separator to slow down the flow and remove larger size particles. Since desired to do so in Koutrakis et al it would have been obvious to have incorporated such means therein in order to monitor higher flow rate streams or speed up analysis.

11. Claims 1, 3, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell et al US 5,922,976 cited in IDS.

This rejection is made pro forma since these claims were indicated as either anticipated or lacking an inventive step using this reference in the corresponding PCT

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application and applicant has provided no arguments against its application. Since it does not appear to anticipate these claims, they are considered obvious thereover. The differences are considered obvious from the teachings of this reference as a whole and especially col. 4, lines 9-21, in view of the knowledge of the worker of ordinary skill in

this art.

12. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. The cited references show analyzers using impactors.

13. Claims 2, 4 and 6 would be allowable if rewritten to overcome the rejection(s)

under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all

of the limitations of the base claim and any intervening claims.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Noland whose telephone number is (571) 272-2202. The examiner can normally be reached on weekdays from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Hezron E. Williams, can be reached on (571) 272-2208.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Thomas P. Noland Primary Examiner Art Unit 2856

Noland/ds

May 5, 2004